

**AMENDMENTS TO THE DRAWINGS**

The attached sheet of drawings includes changes to Figures 2 and 3. This sheet, which includes Figures 2 and 3, replaces the original sheet including Figures 2 and 3.

Attachment: 1 Replacement Sheet

### REMARKS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 7-15 are presently active in this case. The present Amendment cancels Claims 1-6 without prejudice or disclaimer, and adds new Claims 7-15 without introducing any new matter.

The outstanding Office Action objected to the drawings and Claims 3-5 because of informalities. Claims 1-2 and 6 were rejected under 35 U.S.C. §102(b) as anticipated by Kazutaka (Japanese Patent Publication No. JP 03-030239). Claims 3-5 were indicated as allowable if rewritten in independent form.

Applicants acknowledge with appreciation the indication of allowable subject matter. In response, new independent Claim 14 is presented, reciting similar features as original independent Claim 1, and reciting a first and second ring, but without reciting a second bar.<sup>1</sup> New Claim 15 depends upon Claim 14 and recites “the second ring has more bars than the first ring.”<sup>2</sup> Since these claims find non-limiting support in the disclosure as originally filed, they are not believed to raise a question of new matter.

In response to the objection to Figures 2-3, submitted herewith is a Letter Submitting Drawing Sheets along with 1 Replacement Sheet for Figures 2-3, adding label “Background Art,” so as to comply with the requirements of 37 C.F.R. §1.121(d).

Independent Claim 1 is now presented as new, independent Claim 7, and is amended to better comply with U.S. claim drafting practice. Original, dependent Claims 2-6 are now represented as new dependent Claims 8-12. Claims 8-12 are also amended to correct minor formalities and to better comply with U.S. claim drafting practice.

---

<sup>1</sup> Finds non-limiting support in Applicants’ disclosure as originally filed, for example at page 6, lines 1-4 and in Figure 8.

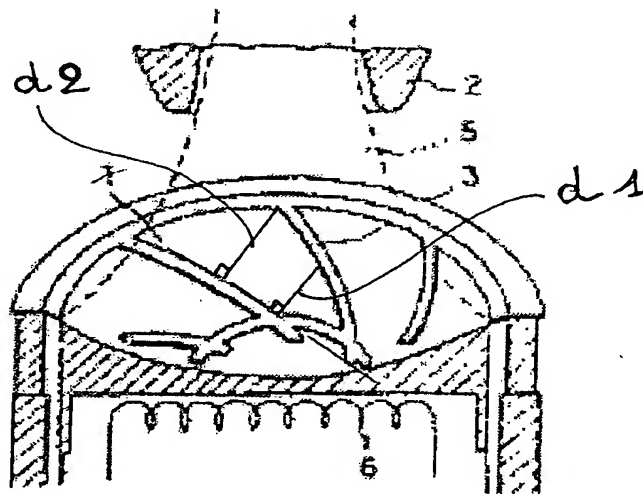
<sup>2</sup> Idem at page 6, lines 10-13.

In response to the rejection of Claims 1-2 and 6 under 35 U.S.C. §102(b) over Kazutaka, now presented as Claim 7, 9 and 12, Applicants respectfully traverse the rejection and request reconsideration of the rejection, as next discussed.

Briefly recapitulating, Applicants' independent Claim 7 relates to a control grid of an electron tube, including a first ring of first bars fixed to a central hub, *the first bars* evenly spaced out on a skewed surface, and *substantially extended as circle pseudo-involutes* about the central hub, so as to form the first ring.

As explained in Applicants' specification at page 3, lines 13-15, with corresponding Figure 4, Applicants' Claim 7 improves upon background grids, since the mechanical behavior and heat conduction of the grid is improved.

Turning now to the applied reference, Kazutaka describes a grid-type electron gun, wherein the grids 3 and 4 form spirals.<sup>3</sup> However, Kazutaka fails to teach or suggest that the first bars are *substantially extended as circle pseudo-involutes* about the central hub, as recited in independent Claim 7. In Kazutaka, the bars of the grids 3 and 4 are not extended as circle pseudo-involutes. If Kazutaka's bars were arranged as circle pseudo-involutes, the distances between two adjacent lines would be the same. But this is not the case, since distances d1 and d2 are not the same, as shown in Kazutaka's marked-up Figure 1.



<sup>3</sup> See Kazutaka in the Abstract.

As explained in Applicants' specification at page 5, lines 6-9, shown in Applicants' Figure 4, and as also recited in dependent Claim 13, in Applicants' invention, any pair of two points on adjacent first bars, wherein the pair of two points defined by crossing points of a line perpendicular to the first bars, are equidistant. Bars arranged in spirals, as taught by Kazutaka, are not bars substantially arranged as circle pseudo-involutes.

Therefore, the applied reference Kazutaka fails to teach or suggest every feature recited in Applicants' claims, so that Claims 7-12 are believed to be patentably distinct over Kazutaka. Accordingly, Applicants respectfully traverse, and request reconsideration of, the rejection based on Kazutaka.<sup>4</sup>

To vary the scope of protection recited in the claims, new Claim 13 is presented for examination. New Claim 13 depends upon Claim 7, and recites "any pair of two points on adjacent first bars, the pair of two points defined by crossing points of a line perpendicular to the first bars, are equidistant."<sup>5</sup>

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for Claims 7-15 is earnestly solicited.

---

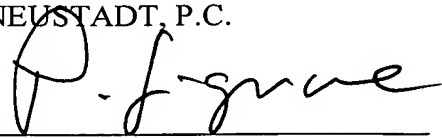
<sup>4</sup> See MPEP 2131: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference," (Citations omitted) (emphasis added). See also MPEP 2143.03: "All words in a claim must be considered in judging the patentability of that claim against the prior art."

<sup>5</sup> Finds non-limiting support in Applicants' disclosure as originally filed, for example at page 5, lines 3-10, and in corresponding Figure 4.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicants' undersigned representative at the below listed telephone number.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



---

Gregory J. Maier  
Attorney of Record  
Registration No. 25,599

Customer Number  
**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 06/04)

Philippe J.C. Signore, Ph.D.  
Registration No. 43,922